In the Claims:

Amend the claims as follows (underlining indicating new insertion and brackets indicating deletions)

Listing of the Claims:

Claims 1 – 12 (canceled)

Claim 13 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising an a catheter tube, a balloon membrane, an inner lumen extension tube, a tip, a connector, a coil, an extracorporeal tube, and a gas lumen insert, said catheter tube comprising an inner tube portion, defining an inner lumen, and an outer tube portion, defining a gas lumen, a proximal end of said inner lumen extension tube being connected to a distal end of the inner tube portion at a joint, a distal end of said inner lumen extension tube being connected to a distal end of the balloon membrane and to the tip, the gas lumen insert comprising a removable elongated body at least partially disposed within the gas lumen, said gas lumen insert extending beyond the distal end of the outer tube portion and overlapping the joint, the connector being connected to a proximal end of the catheter and having a gas lumen port and an inner lumen port, said gas lumen port communicating with said gas lumen and said inner lumen port communicating with said inner lumen, said gal lumen port being connected to a distal end of the extracorporeal tube, the gas lumen insert passing through said gas lumen port and said extracoporeal tubing, said coil being disposed in the extracorporeal tubing between an inner surface of the extracorporeal tubing and an outer surface of the gas lumen insert, said gas lumen insert terminating on its proximal end in a one-way valve, said extracorporeal tubing terminating on its proximal end in a connector for connection to said one-way valve.

Claim 14 (previously presented) The intra-aortic balloon catheter as claimed in claim 13 wherein the catheter tube is at least partially made from polyurethane and the gas lumen insert is at least partially made from polyether block amide.

Claim 15 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, a tip, and a gas lumen insert, said catheter tube comprising an inner lumen and a gas lumen disposed within an outer surface of the catheter tube and extending the length of the catheter tube, a proximal end of the balloon membrane is

connected to a distal end of the catheter tube, a distal end of the balloon membrane is connected to the tip, the gas lumen insert comprising a removable elongate body at least partially disposed within the gas lumen, wherein the catheter tube is at least partially made from polyurethane and the gas lumen insert is at least partially made from polyether block amide.

Claim 16 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising an outer tube, an inner tube, a balloon membrane, a tip, and a gas lumen insert, said inner tube being disposed within the outer tube, a distal portion of said inner tube extending beyond a distal end of the outer tube and being connected to a distal end of the balloon membrane and the tip, the gas lumen insert comprising a removable elongate body at least partially disposed within the gas lumen, wherein the outer tube is at least partially made from polyurethane and the gas lumen insert is at least partially made from polyether block amide.

Claims 17 – 18 (canceled)

Claims 19 (withdrawn) A method for insertion of an intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, a tip, and a gas lumen insert, said catheter tube comprising a gas lumen disposed within an outer surface of the catheter tube, a proximal end of the balloon membrane is connected to a distal end of the catheter tube, a distal end of the balloon membrane is connected to the tip, the gas lumen insert comprising a removable elongate body at least partially disposed within the gas lumen, comprising the steps of:

a) Percutaneously inserting the catheter into a blood vessel of a patient;
b) Advancing the catheter into the blood vessel to a position appropriate for therapy; and
c) Removing the gas lumen inset form within the gas lumen by pulling the gas lumen proximal the catheter.

Claim 20 (withdrawn) A method for insertion of an intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, a tip, and a gas lumen insert, said catheter tube comprising an inner lumen and a gas lumen disposed within an outer surface of the catheter tube, a proximal end of the balloon membrane is connected to a distal end of the catheter tube, a distal end of the balloon membrane is connected to the tip, the gas lumen insert comprising a removable elongate body at least partially disposed within the gas lumen, comprising the steps of :

a) Percutaneously inserting the catheter into a blood vessel of a patient;

b) Advancing the catheter into the blood vessel to a position appropriate for therapy; and

c) Removing the gas lumen inset form within the gas lumen by pulling the gas lumen proximal the catheter.

Claim 21 (withdrawn) The method as claimed in claim 19 or 20 wherein the gas lumen insert occupies more than one third of the cross sectional area of the gas lumen.

Claim 22 (withdrawn) The method as claimed in claim 19 or 20 wherein the gas lumen insert occupies as least one half the cross sectional area of the gas lumen.

Claim 23 (canceled)

Claim 24 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, a tip, and a gas lumen insert, said catheter tube comprising an inner lumen and a gas lumen disposed within an outer surface of the catheter tube and extending the length of the catheter tube, a proximal end of the balloon membrane is connected to a distal end of the catheter tube, a distal end of the balloon membrane is connected to the tip, the gas lumen insert comprising a removable elongate body at least partially disposed within the gas lumen, further comprising a coil and a connector, said connector being connected to a proximal end of the catheter and having a gas lumen port and an inner lumen port, said gas lumen port communicating with said gas lumen and said inner lumen port communicating with said inner lumen, said gas lumen port being connected to a distal end of an extracorporeal tube, the gas lumen insert passing through said gas lumen port and said extracoporeal tube, said coil being disposed in the extracorporeal tube between an inner surface of the extracorporeal tube and an outer surface of the gas lumen insert.

Claim 25 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, a tip, and a gas lumen insert, said catheter tube comprising an inner tube portion, defining an inner lumen, and an outer tube portion, defining gas lumen, a distal portion of said inner tube portion extending beyond a distal end of the outer tube portion and being connected to a distal end of the balloon membrane and to the tip, the gas lumen insert comprising a removable elongated body at least partially disposed within the gas lumen, further comprising a coil and a connector, said connector being connected to a proximal end of the catheter and having a gas lumen port and an inner lumen port, said gas lumen port

communicating with said gas lumen and said inner lumen port communicating with said inner lumen, said gas lumen port being connected to a distal end of an extracorporeal tube, the gas lumen insert passing through said gas lumen port and said extracoporeal tube, said coil being disposed in the extracorporeal tube between an inner surface of the extracorporeal tube and an outer surface of the gas lumen insert.

Claim 26 (canceled)

Claim 27 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising an outer tube, an inner tube, a balloon membrane, a tip, and a gas lumen insert, said inner tube being disposed within the outer tube, a distal portion of said inner tube extending beyond a distal end of the outer tube and being connected to a distal end of the balloon membrane and the tip, the gas lumen insert comprising a removable elongate body at least partially disposed within the gas lumen, further comprising a coil and a connector, said connector being connected to a proximal end of the catheter and having a gas lumen port and an inner lumen port, said gas lumen port communicating with said gas lumen and said inner lumen port communicating with said inner lumen, said gas lumen port being connected to a distal end of an extracorporeal tube, the gas lumen insert passing through said gas lumen port and said extracoporeal tube, said coil being disposed in the extracorporeal tube between an inner surface of the extracorporeal tube and an outer surface of the gas lumen insert.

Claim 28 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, a tip, and a gas lumen insert, said catheter tube comprising an inner lumen and a gas lumen disposed within an outer surface of the catheter tube and extending the length of the catheter tube, a proximal end of the balloon membrane is connected to a distal end of the catheter tube, a distal end of the balloon membrane is connected to the tip, the gas lumen insert comprising a removable elongate body at least partially disposed within the gas lumen, further comprising a coil and a connector, said connector being connected to a proximal end of the catheter and having a gas lumen port and an inner lumen port, said gas lumen port communicating with said gas lumen and said inner lumen port communicating with said inner lumen, said gas lumen port being connected to a distal end of an extracorporeal tube, the gas lumen insert passing through said gas lumen port and said extracoporeal tube, said coil

being disposed in the extracorporeal tube between an inner surface of the extracorporeal tube and an outer surface of the gas lumen insert, said gas lumen insert terminating in a one-way valve, said extracorporeal tube terminating in a connector for connection to said one-way valve.

Claim 29 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, a tip, and a gas lumen insert, said catheter tube comprising an inner tube portion, defining an inner lumen, and an outer tube portion, defining gas lumen, a distal portion of said inner tube portion extending beyond a distal end of the outer tube portion and being connected to a distal end of the balloon membrane and to the tip, the gas lumen insert comprising a removable elongated body at least partially disposed within the gas lumen, further comprising a coil and a connector, said connector being connected to a proximal end of the catheter and having a gas lumen port and an inner lumen port, said gas lumen port communicating with said gas lumen and said inner lumen port communicating with said inner lumen, said gas lumen port being connected to a distal end of an extracorporeal tube, the gas lumen insert passing through said gas lumen port and said extracoporeal tube, said coil being disposed in the extracorporeal tube between an inner surface of the extracorporeal tube and an outer surface of the gas lumen insert, said gas lumen insert terminating in a one-way valve, said extracorporeal tube terminating in a connector for connection to said one-way valve.

Claim 30 – 31 (canceled)

Claim 32 (previously presented) A percutaneously insertable intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, a tip, and a gas lumen insert of half circle or crescent shape, said catheter tube comprising an inner tube portion, defining an inner lumen, and an outer tube portion, defining gas lumen, a distal portion of said inner tube portion extending beyond a distal end of the outer tube portion and being connected to a distal end of the balloon membrane and to the tip, the gas lumen insert comprising a removable elongated body at least partially disposed within the gas lumen, wherein the catheter tube is at least partially made form polyurethane and the gas lumen insert is at least partially made from polyether block amid.

Claim 33 (amended) A percutaneously insertable intra-aortic balloon catheter comprising a catheter tube, a balloon membrane, an inner tube, a tip, and a gas lumen insert of half circle or crescent shape, said catheter tube comprising an inner tube (portion) and an outer tube (portion)

defining a gas lumen, said inner tube being at least partially disposed within the outer tube (portion) and extending beyond a distal end of the outer tube (portion) and being connected to a distal end of the balloon membrane and to the tip, the gas lumen insert comprising a removable elongate body at least partially disposed within the gas lumen, wherein the catheter tube is at least partially made from polyurethane and the gas lumen insert is at least partially made from polyether block amide.